

## **A Case Study on Content Based Instruction for Primary School Children**

### **Estudio de caso sobre instrucción basada en contenidos para niños de educación primaria**

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Teaching English at the primary school level is a challenge in countries such as Colombia where children study this language for only one hour a week in most institutions, and in the best of cases for 3 hours a week. Most of the public schools do not have enough and/or adequate English materials at their disposal for students to work with; therefore, the task of the English teacher is difficult. A case study with a group of children in public schools was developed at Universidad de Nariño (Pasto, Colombia) to test some materials developed by a group of professors who considered CBI (Content-Based Instruction) materials as an option to motivate children to learn English and as a tool for language acquisition through the subject matter contents.

**Key words:** Acquisition, content-based instruction, learning, materials design, problem solving

La enseñanza del inglés en primaria es un desafío en países como Colombia donde los niños solo estudian esta lengua una hora semanal en la mayoría de instituciones, y en el mejor de los casos 3 horas por semana. La mayoría de las escuelas oficiales no cuentan con materiales suficientes o adecuados para la enseñanza del inglés, por lo tanto, la tarea del profesor se hace más difícil. Un estudio de caso con un grupo de niños de algunas escuelas oficiales de Pasto (Departamento de Nariño, Colombia) se desarrolló en la Universidad de Nariño con el objetivo de evaluar algunos materiales desarrollados por un grupo de profesores que consideran que los instrumentos diseñados bajo los principios del método de instrucción basado en contenidos (CBI por sus siglas en inglés) son una opción para acrecentar la motivación de los niños en el aprendizaje del inglés y también una herramienta para la adquisición del idiomas a través de los contenidos de las distintas asignaturas.

**Palabras clave:** adquisición, aprendizaje, diseño de materiales, instrucción basada en contenidos, solución de problemas

## Introduction

Nowadays, second language education aims to enable students to use the target language (L2) in a communicative way so that they are able to interact in different social situations in which such language is needed. In the case of Colombia, and Pasto particularly, the acquisition of a second language becomes a challenge teacher's face at different levels. According to national regulations, namely, the General Law of Education (1994) and the implementation of the National Plan of Bilingualism (2004-2019) by the Ministry of National Education, it is compulsory for schools to promote a communicative use of English in order for students to acquire the B1 level, according to the National Standards of English Language which spring from the standards outlined in the Common European Framework. If this aim is to be achieved, students should start learning English at the primary school level. Given that teaching English at primary schools is not an easy task, teachers should begin implementing ways to motivate students in the use of English at schools in such a way that English becomes a part of, at least, the whole English class. With this objective in mind, a research study was developed at Universidad de Nariño with a group of 15 children whose ages ranged between 8 and 10 years old.

Because the present study was conducted with this specific group and the processes of observation and data collection were done with these students, the researchers categorized it as a case study that could be extended to the child population at primary schools in Pasto, particularly in the public sector where schools share similar challenges. This study focused on the application of a set of units based on Content-Based Instruction (CBI) principles as a means to motivate the use of English in close-to-real daily school activities and tasks, so that students could interact in English during the whole English class time. This paper brings out the theory underlying the teaching of a second language to children, considerations about CBI at school, the materials design process, and the results obtained in this case study.

## Generalities about Language Learning in Children

It is unwise to generalize what each child can do with language at different stages of their growth. Some children develop early and others a little later. Due to these differences in development, it is not possible to say that at a determined age all children can do this and that exactly. Nevertheless, the development of children at some stages may be characterized (Halliwell, 1998; Mitchell & Myles, 2004).

It is said that during a child's first five years the brain builds the connections for language. Therefore, the more words a child listens to the more words the child understands and learns (Dodge & Heroman, 2001). Thus, teachers should know the main characteristics in the

development of language in children so that they can direct the language learning process accordingly.

In view of the fact that children at primary school are in the age range of 5 to 10 years, it is of paramount importance for teachers to know the characteristics children bring to class in relation to knowledge and language development. The cognitive development of children should be mainly aimed to achieve three goals: learning and problem solving, thinking logically, and representing and thinking symbolically. Yet, teachers need to bear in mind that children in *learning and problem solving* should be helped to acquire and use information, resources, and materials with a purpose (Johnson & Johnson, 1999). Similarly, teachers need to remember that children are in constant interaction with the environment and are learning from it. They pay attention to happenings that take place around them. If these principles are considered, the teacher will understand the necessity to base the language teaching process on the development of curiosity and asking-question skills (Baral, 2003). Teaching should also focus on making predictions based on what children observe. Likewise, they should be directed to evaluate possible solutions so that learning can take a step further than just knowing facts about the language but being able to use that knowledge in real life situations. The application of the acquired knowledge allows for learning expansion.

When aiming at the enhancement of *thinking logically*, it is important to consider the development of gathering and making sense of information skills by means of comparing, contrasting, sorting, classifying, measuring and recognizing activities. If teachers allow students to use their logical thinking, they will be able to understand how their world works and will pay attention to its organization.

If students work on skills for *representing and thinking symbolically*, they will be able to use objects in a unique way, they will be capable of illustrating the world through charts and pictures, for instance, when people need to represent findings in maps or graphs, or when students are asked to represent characters in a story. These symbolic representations provide children with the opportunity to use both materials and their own imagination to embody and discover abstract ideas.

Along this cognitive development, another specific aim is language development. According to Halliwell (1998), children develop language through communication processes. These processes can be oral or written. A caveat is pertinent here because the use of oral language increases at school since it is the way to establish and maintain relationships with other people (Mitchell & Myles, 2004). Written language also develops at school and is mainly used for tasks related to specific subject matter. The main language development goals are directed at using the spoken language in communicative processes with people, to expand children's vocabulary, to express, to relate to others by means of the comprehension of the oral language they use, to use language to solve problems and to

participate in conversations. When children partake in school life they learn to listen and speak, they begin to control their world and get involved with others. This is also a means for them to store information.

The other two language skills that are very important to consider in children's developmental process are reading and writing. Here, children begin to understand the written texts, to comprehend the objective of print and the way it works. By means of reading the teacher provides students with a way for acquiring information and getting in contact with new worlds so imagination and creativity can be developed inherently. By means of writing children expand memory, improve communication skills and develop the comprehension and explanation of world facts.

## **Content-Based Instruction (CBI) at School**

Content-Based Instruction (CBI) is the term applied to the English teaching approach based on the subject matter or material that students have to study at school (Grabe & Stoller, 1997). CBI has been extremely successful in the many different contexts where it has been applied such as in Canada and the United States (Genesee, 1998). Such experiences have showed that students learn faster in ESL classes in which Content-Based Instruction and immersion activities are developed (Cummins, 1981; Ramírez, Yuen, Ramey & Pasta, 1991). One assumption that can be made is that this quicker learning process can be related to the motivation students feel when faced with Content-Based work.

Grabe and Stoller (1997) present Krashen's input hypothesis as very useful support for content-based instruction to be applied in English training. In this hypothesis, Krashen (1985) argues that comprehensible input presented to students facilitates the acquisition of English. As CBI is based on the presentation of comprehensible input in the form of the contents of the subject matters, students are faced with comprehensible input that interests them, and that provides not only content, but also meaning in the foreign language. CBI can serve as an alternative for teaching English to children in such a way that they feel motivated and have a clear purpose in learning the language through the contents of the subject matters they are dealing with at school.

Content-Based Instruction has widely been used in second language contexts in which schools have designed specific programs that combine language and subject-matter contents. The application of this approach in a foreign language situation should, therefore, begin by the preparation of specific programs for working in both the language and the contents of the subject matters.

Tedick, Jorgensen and Geffert (2001) explain the reasons for the success of CBI in approaching language and content instruction. They cite authors who have long worked on

research in this field (Grabe & Stoller, 1997; Curtain & Haas, 1995; Met, 1991; Lyster, 1987; Genesse, 1998) and they present the following principles as the main features of CBI:

- Content-based instruction increases the interest and motivation of students since students work with meaningful contexts.
- The process of language acquisition takes place naturally in content-based instruction since language is presented in contexts in which meaningful communication occurs.
- The work with contents that are organized according to topics becomes coherent for students, and therefore, can be established in long-term memory. It becomes easy for students to remember and therefore learning is improved.
- The emphasis during the teaching and learning processes is not language for the sake of language, but the meaningful contexts in which similarly meaningful tasks are developed.
- The cognitive level of the students, their interests and their needs, are considered at all times since the contents expressed through English correspond to the cognitive developmental stage of students.
- The comprehensible input students receive and the form-focused content instruction favors language acquisition.
- The interesting and engaging tasks students develop encourage them to be very involved in their language acquisition process.
- The emphasis on content and real tasks makes a connection between the real world and the skills that the students practice.
- The possibility of using the students' background knowledge in content and language-related topics favors language acquisition.
- The work on both meaning and form naturally come together in content-based instruction.
- The negotiation for meaning that students go through in content-based instruction is real since tasks involve real-life tasks. This negotiation for meaning favors language acquisition.
- The use of learning strategies such as reflecting, rehearsing and solving problems help language acquisition.
- The presentation of complex language becomes easier since the contexts in which the authentic content of the subject matters appear to favor understanding.
- The language skills are improved since different approaches to language teaching and learning, which have proven to be successful, can be applied in conjunction with content-based instruction (cooperative learning, whole language and task-based approaches, etc).

- The possibility of applying thinking skills facilitates the process of language development (absorbing, questioning, organizing, categorizing, comparing, representing, analyzing, identifying main ideas, attributes, components, relationships, patterns, inferring, predicting, stimulating).
- The cognitive demanding activities that can be developed in content-based instruction enrich the cognitive development of students.
- The functions of language are respected in the integration of language and content since, with the use of different language contexts in the different subject matters, meaning changes according to each context.

In our foreign language contexts, the Content-Based Instruction process can be applied not only to motivate students but also to achieve a certain fluency level in English at primary school. The monotony of children's classes many teachers complain about can be changed to very active classes in which students have something very meaningful to do.

CBI can be implemented early in children's training in foreign language contexts. Students can be introduced into CBI at pre-school level with very simple materials since they are at a beginning language level. At the pre-school level students do not need to write and read in the foreign language, so all of the activities should be designed and aimed at developing listening and speaking skills. The topics addressed at this age need to be related mainly to their daily lives and the daily topics they study in the subject matters at school. Students' requirements when working with CBI vary according to the context where this method is applied. For our EFL (English as a Foreign Language) context where English is not the spoken language, most of the students who start CBI at the pre-school level are beginning English learners; therefore, the materials need to contain a number of illustrations in such a way that the oral language used by the teachers for class delivery purposes such as directions, examples, demonstrations, explanations, and so on and so forth, is easily understood. If a group of students started CBI at the pre-school level, it is advisable that they continue with the same kind of instruction so that their improvement in the foreign language can be observed throughout, at least, the school years.

In view of the fact that teachers will not only be teaching English but also the contents of the subject matters, it is crucial for them to be fluent in English and to be familiar with the contents to be taught. Student-teachers are being prepared to perform this content-based instruction program at the Universidad de Nariño located in Pasto, and even some of them have already started the process of materials design and its application as research processes in their careers. Some students who have already applied CBI materials and instruction during their practicum have reported successful English classes (Sánchez & Obando, 2008).

On the other hand, for CBI to be effectively implemented in class, particular features of the teacher's component are required. Some characteristics of teachers in content-based

instruction are presented by Tedick, Jorgensen and Geffert (2001). They concur that the English teacher who incorporates content-based instruction in his/her teaching activity should do the following:

- Use the target language consistently;
- Consider students as active participants in the teaching and learning processes;
- Plan the tasks so students are actively participating during the class time;
- Make emphasis on comprehension starting at beginning stages;
- Provide the opportunity for students to use meaningful language in communicative and significant contexts that involve the development of interesting content tasks;
- Develop continuous assessment processes so he/she knows how each individual student is progressing in language knowledge;
- Establish a very comfortable atmosphere for classes;
- Take into account the affective aspects so students feel sufficiently motivated and relaxed to participate actively in class; and
- Design materials of all kinds so students get motivated.

From the experiences developed elsewhere (Canada, Singapore, the United States, among others) and applied in bilingual education (Sheppard, 1997), it has to be noted that at the beginning of Content–ESL instruction, teachers had to prepare complete programs for teaching the subject matters in schools with a huge emphasis on language instruction. Although these were second language contexts and some teachers managed English while others were in charge of the content of the subject matters, it was necessary to combine the programs. Consequently, the hard task was for the content teachers to get used to working with the topics in such a way that foreign language students could improve the development of the target language at the same time.

The decision was then made to permit the ESL teacher and the English departments to manage the integration of language and content. This was done because it is much easier for a teacher who is used to working with ESL students to integrate language and content instruction, than for a content teacher to work with language, since he/she has never received any training in this aspect.

Using Sheppard's (1997) argument above with reference to the EFL context, it is possible to apply content-based instruction in English classes. Because we already have the problem of non-fluent English speakers teaching the content areas (mathematics, science, arts, etc.), the easiest way to solve this problem is to ask the English teacher to incorporate the teaching of contents in the English programs. This does not mean that having very fluent English teachers at schools in Pasto is an easy task; however, it is easier than having content teachers with an adequate command of English.

The work of the English teacher then increases since it is not only with the language contents that he/she will be working, but also with English, and the contents of math, science and arts, to mention but a few examples. The syllabus planning process of the English classes, then, will have to be a joint task where the content teachers will have to share information with the English teacher during the planning process to facilitate the integration of both content and language at each level of instruction.

The study carried out at the Language Center of the Universidad de Nariño yielded some results that have been agreed on and mainly directed to the requirements of English teachers who apply content-based instruction in foreign language contexts like ours. They are comprised of the following:

- Teachers need to have a good command of the foreign language so they can communicate in English and teach the class in the foreign language. When teaching children, the teacher has to be fluent and sure about the language she/he is going to use.
- Teachers need to have some knowledge of the subject matters students study at school. For instance, if a teacher has to work with flowers, it would be ideal if the teacher prepares to talk about flowers from different points of view (flowers seen by an artist, flowers seen by a biologist, flowers seen by a singer, flowers seen by an economist, etc.) before class. The knowledge of the topics from different subject matters is needed for teachers who apply Content-Based Instruction.
- Teachers need to know how to design specific materials for CBI in English classes.
- Teachers need to be able to adapt to the students' level of English and of the knowledge of the content areas in order for the input requirement to be properly provided.

## **The Materials Design Process**

Given that the students participating in this study did not have experience with CBI instruction, it was necessary to design materials to suit their needs, interests, and limitations. Some materials were designed wholly and some others were adapted. The purpose behind designing the materials for the study was, first of all, the possibility to contextualize contents; second of all, the fact that they can be easily updated; and, finally, the chance to capitalize on the interest students display for teacher-made materials (Block, 1991).

The steps taken in the design of the unit for students of the fourth and fifth grades at primary school were as follows:

1. Determine a list of necessary topics for students in the grades aimed both at English knowledge and subject matter content.



2. Establish a set of possible types of activities, exercises, illustrations, etc. to be included in each of the four thematic units. These sets had to be particularly motivating for students' ages. Also consider the time needed for the total unit to be developed and how the time could be divided.
3. Produce a map of the units so that the distribution of the contents, exercises, and illustrations in the unit can be seen clearly.
4. Produce a first draft of the unit. If material is taken from content books or the internet, request of permission to use the material in the unit is needed.
5. Appoint an editor to be in charge of compiling the drafts to put them in a printout.
6. Develop a pilot session. In triads, students have to check the understanding of two proposed activities.
7. Revise the materials designed once the pilot process has finished in case there are changes that need to be done.
8. Once changes have been incorporated, a revision process has to be undertaken. Some English teachers from 3 different primary schools were asked to review the material and provide some feedback for the case study.

## **The Study**

The main purpose of this study was to test a set of four units designed according to CBI principles and with contents that children should study at their primary schools in the fourth and fifth grades. This design was also supported by the experiences presented by Gianelli (1997) related to the benefits of the implementation of thematic units as a way to create environments conducive to learning.

### ***Sample***

This study was developed with 15 students whose ages ranged from 8 to 10 years of age. These students were false-beginners since they had already had two years of English instruction at schools with one hour of English per week. Besides, these ages correspond to the minimum age range accepted at the Language Center of the Universidad de Nariño for beginning courses.

The students in the sample participated in English classes at the Language Center in the University of Nariño and were all grouped in the same class. It is necessary to mention that students at the Language Center are grouped according to the level of English they have and it is based on a placement test that teachers from the Center give them at the moment they register.

## *Procedure*

The study was developed over one semester and students were in contact with the CBI materials the 16 weeks of the semester, 8 hours a week. This was the time needed to implement the four units that were designed. For each unit, it was necessary to spend 4 hours at the beginning for the pre-teaching activities and 4 hours at the end of the unit for the assessment tasks. Overall, a month was spent on each unit. Only the unit on Water will be presented and commented on in this paper as a point of reference and an idea to be shared with in-service teachers who want to innovate in their professional practice. The other three units that were designed were on Insects, The Human Body, and Climate. The researchers considered it important to divide the whole research process in stages as follows:

The first stage of the study was to identify the students' needs in terms of knowledge of the subject matter by means of the application of a survey to the content area teachers. The second stage consisted of the identification of subject topics that students liked by means of the application of a survey to children in fourth and fifth levels. A third stage consisted of reviewing the subject matters of Spanish textbooks teachers used in their classes and comparing them with English textbook subject matters to see if they matched or overlapped contents so the researchers could adapt English authentic materials to the CBI unit to be used in this study (Gianelli, 1997).

With this information collected and analyzed, the researchers started the materials design process. During the materials design process, the researchers were given feedback by three children who were invited and voluntarily accepted to check the materials and observe their design (pictures, size of fonts, tables, etc.). The objective was to find out whether they considered the materials appealing and interesting enough. In this way, the researchers assembled the materials in the units that were developed with the subjects in the study (See Appendix for the sample unit). One of the most salient aspects of the materials was that they provided both the use of creativity by students and enjoyment when developing the practical activities that appeared in the units. It was also possible to see that English was the medium to access knowledge and not the aim of the class per se.

The first day of class, it was important to let students know about the benefits of learning a new language. The teacher motivated the kids showing them that learning English was very easy. For example, the teacher showed students pictures of well-known advertisements that included English words. Since they are widely known students were able to say the words and interpret the pictures. In this way, the students could realize that English was easy to understand. Another significant thing was that the researchers agreed to provide students the time they required to progress in the language learning process. In other words, when applying the units, every student could follow a smooth path to progress in the language. As the contents of the units reflected the contents students had already studied in the subject

matters different from English, they were able to understand the texts presented and the exercises proposed. Students enjoyed using English to talk about familiar things and to develop class tasks and projects. They were always taking extra time to ask the teacher out of class about the exercises and contents of the different units. This fact showed teachers that learners enjoyed the materials. The four skills were integrated and put into practice. The units were orally recorded by means of computer software, so it was possible to practice listening skills. Listening and speaking skills were developed from listening to the teacher, listening to tapes and listening to classmates discussing interesting and familiar topics. Reading and writing were structured in the units mainly based on the use of authentic materials such as texts taken from social sciences books and web pages. Most of the activities in the case of reading and writing were done in a controlled way. Different kinds of texts such as narrations and poems were used so students could notice the difference in writing that might take place in the foreign language. Sentence completion was the basis for the development of pre-writing skills that could lead children to the construction of sentences and short texts.

## **Discussion and Conclusions**

In terms of meeting the first objective, that is, increasing the children's motivation to learn the language, it can be concluded from this experience that the children who participated in this study were highly motivated to learn English thanks to the type of materials used (advertisements) in the first class and the activities developed from them which responded to one of the main characteristics in language learning with children, namely, they were able to identify the product names in a contest. Halliwell (1998) clearly states that children learn in a playful fashion, therefore, teachers should take advantage of this characteristic and use it to foster learning in a natural way.

Later, in the phase of production, students had to design a similar ad with a product they used in their daily life activities and present it to the class. In this activity, the use of the children's imagination and ability to grasp meaning combined with their creative use of limited language resources translated into a tangible outcome. This is very important because children need to work with real elements to make connections that result in meaningful learning. In this particular activity, the children used frame expressions such as: THIS IS AN AD ABOUT\_\_\_\_\_, DO YOU LIKE \_\_\_\_\_, WHERE DO YOU BUY\_\_\_\_\_ that were used by the researchers during the presentation phase of the ads at the beginning of the class. The students were able to use these expressions even though it was the first time they had heard and used them in the English class.

During the treatment, the researchers started developing the contents of the units. The units were accompanied with real materials as much as possible following the principle that children learn by doing. This is a fact that motivated students. The materials presented in the

units dealt with the integration of the four skills at a beginning level to maximize the students' participation during class time and their motivation. This aim was achieved because the contents used in the units touched on the contents that are related to the background knowledge students had. In this regard, Ausubel (in Horwitz, 2008) holds that meaningful learning involves the connection of new material to the learner's existing knowledge or schemata. Children enjoy when they know what they are doing and what purpose it serves. In this activity, not only were children practicing the words, but also coming to grips with concepts of descriptions, cost, importance, needs, and so forth (Halliwell, 1999).

In the same vein, Halliwell (1998) clearly states that young language learners are not blank slates. On the contrary, they have already been endowed with a series of well-established instincts, skills and characteristics which facilitate the process of learning the new language. The task of the teacher is to identify those latent resources children use to learn their mother tongue and capitalize on them to extend them to the learning of the foreign language. This author refers to the children's capacity to grasp meaning, therefore the importance of offering enough contextualized information accompanied with illustrations, gestures and facial expressions, and demonstrations to convey meaning parallel to what is being presented. Another important characteristic is the children's capacity for indirect learning. At their young age, children have not reached a mature capacity for conscious learning of grammatical patterns or complex terminology. In contrast, most children feel confident when performing more active, funny hands-on activities. Providing children with experiential learning, that is, setting up real tasks in the language classroom, can provide them with the exposure to real language, allowing their subconscious minds to work on the processing of language while their conscious minds are focused on the task. This can be achieved through games, contests, field visits and projects that involve the use of all the senses. This characteristic is closely related to the children's capacity to use limited language resources creatively. According to Halliwell (1998, p. 4), "in the early stages of their mother tongue development children excel at making a little language go a long way". This means that children have the innate capacity to create words by analogy or even invent new words to communicate when they need to. This is a key element in language development and needs to be acknowledged as an important resource for language learning. However, this deep-rooted human instinct is activated when the need to communicate has been intensified by some activity which generates real interaction or calls on the imagination (Halliwell, 1998). These characteristics need to be borne in mind at the moment of designing materials and activities that go along with them if teachers are to exploit the real built-in potential children bring to the language class. CBI provides the space to do this.

As discussed above, at early stages of language learning children should not be forced to read and write the way older learners could or need to be. The activities that were devised for the children participating in this study were authentic pre-reading and pre-writing tasks that

promoted their active participation in comprehension tasks. Pre-writing was seen as an easy skill to deal with since the activities were controlled and motivated the children to express their ideas in sentences and short texts that introduced them to composition development.

Assessment is another factor that needs to be included in the planning of any lesson. This process can be easily carried out by using the same activities and products learners display in their classes. In this case, another important aspect of the unit was that students were told to collect their work in a portfolio. This product was presented to the class the last day of study of the units. Students shared experiences with classmates and presented their work trying to use as many words and expressions in English as they could in reference to everyone's portfolio. Besides detecting weaknesses in the children's production, it is important to consider that children feel a sense of pride in displaying their work and this type of activities encourages them to keep learning. Since motivation at an early age and at any stage of learning is vital, teachers should strive for encouraging positive attitudes and motivation towards the learning of the foreign language (Horwitz, 2008).

Apart from the conclusion on the use of the materials by the children in this study, it was possible to presume that there is a very big advantage when teachers produce their own materials because they know the students they are creating the materials for. Therefore, if teachers know what background knowledge the materials can make use of, they will be in better shape to facilitate the use of the foreign language. In the process of producing the materials for this specific group of students, teachers were able to identify the methodology aimed at constructing them and realized that they were able to design materials as an enjoyable task to develop language knowledge for a particular context.

The materials design process should be anticipated by a needs analysis stage, accompanied by a syllabus design process, and always followed by evaluation and correction stages that would provide enough feedback about the success or failure of the design. This study became a valuable experience for all those involved in the project who could prove firsthand that learning a language under the right conditions, those offered by the implementation of CBI, can be an easy, motivating and long-lasting experience. However, further research needs to be done in this area. That is why a research project in the same direction is already being carried out by the research group on CBI at the Universidad de Nariño. Hopefully, the results of the study will bring some useful resources to benefit teachers and students in the region and beyond.

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## Appendix

### Unit 2

### Water

**Audience:** 4<sup>th</sup> – 5<sup>th</sup> graders

**Time:** 32 hours

**Objective:** Students will identify the vocabulary related to water and will be able to use some basic frame structures to talk about its meaning, forms, cycles and importance for the planet and human beings from the context in which the theme will be presented.

**Linguistic objective:** Students will learn the vocabulary related to water in context, including nouns, adjectives and verbs.

Besides, the frame structures that will be presented by the teacher will be used by students in the production stage. For example:

**Language:** Water related vocabulary

Water is useful for \_\_\_\_\_

People use water for \_\_\_\_\_

Water is important because \_\_\_\_\_

Adjectives: clear, dirty, drippy, soapy, sloppy, floppy.

### Procedure:

1. Look at the pictures. Here the teacher shows students different pictures that represent the different forms in which water is found in nature (lakes, rivers, oceans, water faucets, etc.)
2. Describe the pictures with the students. Have them deduce they observe water in lakes, rivers, etc.







Ask the following questions:

- What is a lake?
  - Draw two rivers.
  - What do oceans contain?
3. Now ask students to observe the globe.



- 3.1 Observe the globe with the students and describe it for them. Ask them to pay attention to the parts where water is represented on the globe. Rivers, lakes and oceans constitute **SURFACE WATER**.
- 3.2 Describe them again stopping at the words you want the students to use later. If they do not remember, repeat them again, and make sure that they repeat the words with you. Do this again if it is necessary.
- 3.3 You can have a contest to verify if students have finally learned the vocabulary of the description part.
4. **EXPERIENTIAL LEARNING ACTIVITY.** Talk about the two kinds of water that people can find in surface water: **SALT WATER AND FRESH WATER**.

- 4.1 Bring fresh water for students to taste and compare with salt water that can be brought to class. Also, bring sweet water and water with different flavors for students to identify the different flavors. Have students taste water and ask them to identify the taste. You can ask these questions:
  - Have you ever tasted salt water?
  - Was it good?
- 4.2 Bring the globe to class, ask students to observe and compare the quantity of water on the globe. You can ask:
  - Compare: Is there more water or land on the globe?
  - Do you think it is possible to find more water beneath the surface of the ground?
  - Is it possible to find water that we cannot see on the globe but is hidden somewhere inside the surface of the earth?
5. Now you and the students are going to represent in a graph the amount of water on earth and its distribution. Here is what you can tell your students:
  - Draw a circle and ask students to divide it in the following parts:
  - 97% of the circle space will constitute the ocean water.
  - 2% of the circle space will constitute glaciers and ice.
  - 1% of the circle space will constitute fresh water.

Once students finish designing the pie graph, ask them to color it using different colors for each section. Once colored, students label the graph.

(Adapted from: <http://www.epa.gov/safewater/kids/tuar.html>)
6. Develop the pre-reading “All the water in the world”.

### **Instructions:**

- 6.1 The teacher will read the text aloud and the students will listen to the reading in order to get the main picture of the text. At this point, the students have not been handed out the text yet. You can try a game at this point. Every time the students listen to a word or complete sentence they understand, they will raise their hands. This will also help you to see if the vocabulary and the structures have been learnt or if more work needs to be done.

### **Reading: all the water in the world**

Because water covers three-quarters of the earth’s surface, it might appear that there is plenty to go around and that we will never run out of this

valuable resource. In reality, however, we have a limited amount of usable fresh water. Over 97 percent of the earth's water is found in the oceans as salt water. Two percent of the earth's water is stored as fresh water in glaciers, ice caps, and snowy mountain ranges. That leaves only one percent of the earth's water that is stored either in the soil (aquifers) or bedrock fractures beneath the ground (ground water) or in lakes, rivers, and streams on the earth's surface (surface water).

We use fresh water for a variety of purposes. Agricultural uses represent the largest consumer of fresh water, about 42%. Approximately 39 percent of our fresh water is used for the production of electricity; 11 percent is used in urban and rural homes, offices, and hotels; and the remaining 8 percent is used in manufacturing and mining activities.

(Taken from: Project Aquatic Wild, How wet is our planet? Western Regional Environmental Council. 1987. A-3).

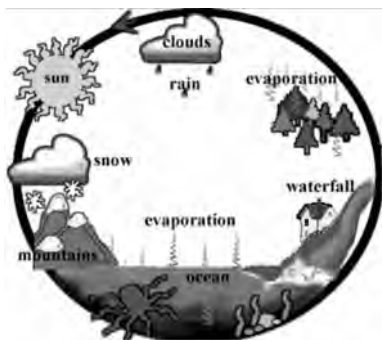
- 6.2 Read the text aloud. Ask students to follow you as you read.
- 6.3 Show pictures and ask students to identify in which part of the reading you find information about the aspects they observe in each picture.



- 6.4 Make a graphical representation of the percentages about the purposes for which water is used, draw a circle and divide it according to the percentages you find in the text. At this point you can present some examples of what you or others have done.

7. HANDS-ON ACTIVITY: THE WATER CYCLE

- 7.1 Children are presented with a picture of the Water cycle. You can ask them to observe the picture and ask them if they can give it a name in English.



Ask the children: Do you know what this is called?

From what you observe in the picture: What is the water cycle?

- 7.2 Look at the elements that appear in the water cycle. Take a magazine and cut out pictures of clouds, sun, rain, snow, mountains, ocean, waterfall, trees.
- 7.3 Listen to the explanation of the teacher. The teacher will explain the water cycle and how it functions.

**Listening activity:** Children listen to the teacher or another voice if it can be recorded in advance.

### How the water cycle functions

Water is always moving, it is never in the same place. Rain and snow are formed of water. They are in clouds. This water falls to the earth in the form of rain and snow. This water from rain and melted snow runs downhill into rivers, lakes, waterfalls. This water from rivers goes into the ocean.

There is a process of water evaporation. By means of this process the liquid water becomes a gas with the help of the sun. This evaporated water moves into the atmosphere. In the atmosphere, this gas water forms clouds. Then the cycle starts again.

(Taken from <http://www.epa.gov/safewater/kids/cycle.html>)

7.4 Now you are going to produce the water cycle in your own classroom. You need to have the following elements:

- 1 jar
- 1 plant
- A bottle cap
- Some soil
- Some sand
- Small rocks

Once you have the elements above, fill the jar first with the small rocks, then sand, then soil, and then the plant should be placed in the soil. Put the lid on and take the jar to a sunny place. Now you can observe how your water cycle works.



Observe the picture above to see how the elements should be organized in the jar

(Taken from: <http://www.epa.gov/safewater/kids/tuar/html>)

7.5 After doing the experiment comment on it to your teacher.

With the help of your teacher and classmates, tell the teacher and the rest of the class the following: Where you found the elements, how you organized them in the jar, and what the results of your experiment were.

**Note:** As a complement the EPA site on the internet has a very nice word scramble about water. It can be applied to students since the word that needs to be arranged appears in a sentence, making it easier for students to work with this kind of activity; at the same time, it provides students a contextualized language task.

Read every sentence. Arrange the letters of the scrambled word so you can complete the sentence and understand the message totally. The first letter is given to you as a hint.

- All living things need **W**\_\_\_\_\_ (tawer) to live.
- When water evaporates, it gets into the atmosphere and forms **C**\_\_\_\_\_ (dlocus).
- Less than 1% of all water on earth is **F** \_\_\_\_\_ (serfh) water.
- The process of **E**\_\_\_\_\_ (nvtieaproa) converts water into clouds.
- A cloud is formed by **W**\_\_\_\_\_ (erawt).

(Adapted from: <http://www.epa.gov/OGWDW/kids/scram.html>)

8. **FIELD TRIP:** Take students for a nature trip. Students visit a park. There, they are going to observe the different forms in which water is found in nature.

While the teacher and the students walk around the park, the teacher shows students the different places where water can be found. Students will observe a river, a small lake, a swimming pool, drops of water, drinking water.

The teacher will talk to students about the uses of water in daily life.

When students get back to the classroom, they have to design the park and everything they observed with play dough.

9. **LISTENING: WATER IS VERY SPECIAL**

Instruction: Listen to the tape.

- 9.1 The teacher asks students to listen to the poem at least three times. The teacher asks the students to identify the words that they understand, and the type of text they are listening to (song, news, TV program, poem, etc.). He/She asks them what the topic of the poem is. Then, the teacher reads the poem and gets students to read it while the tape is on.
- 9.2 After listening to the poem and repeating it, students will illustrate the poem. This poem will be illustrated in a mural so the class has to work in small groups to make a nice mural and explain the mural with the words from the poem.
- 9.3 Students will display their work.

## **WATER IS VERY SPECIAL**

By Beth Corum

Water is in drippy drops

Water is in soapy mops

WATER IS VERY SPECIAL

Water fills swimming pools

Water fills fishes' schools

WATER IS VERY SPECIAL

Water makes spaghetti hoppy

Water makes puddles sloppy

WATER IS VERY SPECIAL

Water keeps us all alive

It's necessary to survive

WATER IS VERY SPECIAL

**Note:** The contents of this unit can be developed with students who are in the fourth and fifth grades of primary school since in both levels students have content areas in which the topic about water is studied. The study of this topic in the content areas is important to activate the background knowledge of kids in English classes.